

REMARKS

Summary

Claims 1-67 were pending. Claims 53-67 have been renumbered to correct the error identified in paragraph 1 of the Office action of April 1, 2003. In that Office action, the Examiner required an election of species, to which the Applicant replied on April 30, 2003, electing, with traverse, Claims 1, 11, 21 and 36, and claims dependent thereon. In the present Office action, the Examiner has revised the composition of elected species, requiring a new election of species. The Applicant elects Group I, consisting of Claims 1, 2, 9-10, 18-19 and 31-36, with traverse. Claims 3-8, 11-17, 20-30 and 37-67 are presently withdrawn from consideration. The Applicant asserts that Claims 18-19 and 31-35 are improperly included in Group I. Claims 1 and 36 have been amended. After entry of this amendment, Claims 1, 2, 9, 10, 18-19 and 31-36 are under consideration. No new matter has been added. The Applicants have carefully considered the references and reasons advanced by the Examiner and respectfully traverse the rejections to the elected claims in view of the discussion presented below.

Traverse of Restriction Requirement

In the Office action of April 1, 2003, the Examiner required a restriction to one of four species, in response to which the Applicant elected the first listed species, "a motor with a extended rotor (Claims 1, 11, 21, and 36)" which constitute all of the independent claims and claims dependent thereon. This election was made, with traverse, in a paper submitted April 30, 2003. The Applicants maintain the traverse as stated therein, and respectfully request reconsideration of the restriction requirement.

In the present Office action, a new species has been identified, and the restriction requirement rewritten such that there are now five groups, of which Group I consists of Claims 1, 2, 9-10, 18-19 and 31-36. Since the Applicant is

required to elect a species as proposed by the Examiner, even if such restriction requirement is traversed, the Applicant elects Group I, with traverse. The remaining claims, directed towards non-elected groups, are withdrawn. The reasons given for traverse in the paper of April 30, 2003 remain cogent and are reasserted in response to this restriction requirement. Additionally, the Applicant submits that Claims 18-19 and 31-35, being claims dependent on withdrawn claims cannot properly be included in Group I and should also be considered to be withdrawn.

The Examiner states that Claims 1, 11, 21 and 36 are generic for all species (Office action, paragraph 1, lines 4-5). But in paragraph 2, Claims 2-8, 11-17, 20-30, and 37-67 are withdrawn by the Examiner on the basis that there are no allowable generic or linking claims. The Applicant asserts that Claim 1 is a generic linking claim, as are Claims 11, 21 and 36. Since Claim 1 is being examined as part of elected Group I, the allowability of the claim will result in the examination of appropriate withdrawn claims. MPEP § 809.

The Applicant notes that the term "extended stator" which the Examiner has applied to Group I claims is not found in the present application and Applicant's use of the term has been solely for the purpose of clarity in identifying the selected group of claims, as they were not given group numbers in the previous Office action.

Claim Objections

Claims 18-19 and 31-35 were objected to under 37 C.F.R. 1.75 (c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. The Applicant respectfully traverses these objections. The claims as presented each recite an additional element or limitation on the claim from which it depends. This is fully in accordance with 37 C.F.R. 1.75 (c). These claims would be allowable, without more, if the claim upon which each depends were allowable. But, the claims upon which they depend have been withdrawn in

accordance with the restriction practice. As this is acknowledged by the Examiner, the Applicant respectfully requests that the groupings of species be reconsidered so that these claims may be considered at an appropriate time.

Claim Rejections

35 U.S.C. § 102 (b)

Claims 1-2 and 36 were rejected under 35 U.S.C. § 102 (b) as anticipated by Lehman et al. (US 2,867,762; "Lehman").

The Applicants submit that the Examiner has not made out a *prima facie* case of anticipation. However, the Applicants have amended Claims 1 and 36 in order to better describe the claimed subject matter.

Amended Claim 1 recites, *inter alia*, a rotor a plurality of permanent magnet poles [emphasis added].

Lehman teaches a motor having a rotor "made of a soft or temporary magnetic material such, for example, as soft iron" [emphasis added] (column 2, lines 16-18). The structure of the rotor is said to have "four salient poles" (column 2, lines 14-15) which, being fabricated of the temporary magnetic material, cannot be permanent magnet poles. Permanent magnet rotor poles permit the use of multiphase electrical excitation of the stator coils. The structure of the rotor taught by Lehman is thus quite different from the arrangement of Claim 1 where the rotor is comprised of permanent magnet poles.

The Applicants respectfully submit that the reference does not anticipate the present subject matter as it does not identically describe the elements, as claimed in this application.

For at least this reason, the Applicants respectfully submit that the reference does not teach the all of the elements, limitations and the arrangement of Claim 1 and a *prima facie* case of anticipation cannot be made out.

Claim 2 is dependent on Claim 1, further limiting the subject matter and, without more, is allowable. Claim 36, being amended in the same manner as Claim 1, is allowable for the reasons presented above.

35 U.S.C. §103 (a)

Claims 9 and 10 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Lehman in view of Tajima et al. (US 5,432,644; "Tajima").

Claims 9 and 10 are claims dependent on Claim 1, which the Applicant submits is allowable. As such, without more, these claims are allowable as claims further limiting an allowed claim.

Claim 9 is independently patentable as Tajima teaches exactly the opposite of Claim 9. In Fig. 5 of Tajima, the magnetic poles and the stator subtend an angle greater than 180° with respect to the center of rotation of the rotor (column 6 lines 45-48), whereas the arrangement of Claim 1 has a stator which extends not more than 180° with respect to a central angle of the rotor. The arrangement of Claim 1 has an advantage of minimizing the amount of expensive metal used in constructing the stator and of reducing the influence of the magnetic fluxes from the rotor on the magnetic head. Since the combination of Lehman and Tajima does not teach all of the elements of Claim 9, there is no *prima facie* case of obviousness. In addition, combining the teachings of Lehman and Tajima would render the apparatus inoperative, since Lehman requires a single-phase electrically-commutated excitation and Tajima requires 3-phase excitation to work.

Reinstatement of Certain Withdrawn Claims

The Board of Appeals held that it was in error to reject a dependent claim while allowing its parent. *Ex parte Ligh*, 159 USPQ (BNA) 61, 62 (Board of Patent Appeals and Interferences, 1967). When any claim is allowed, all dependent claims can be allowed without further examination for novelty or obviousness, other to make sure that they are dependent claims and satisfy 35 U.S.C § 112. Since examination in this manner does not require a new search, Claims 3-8 and 37-67, being drawn to statutory subject matter, should be considered along with the allowed claims upon which they depend.

In view of the amendments to Claims 1 and 36 and the reasons given above, the Applicant respectfully requests that the Examiner reinstate and allow Claims 3-8 and 37-67 as claims dependent on allowable Claims 1 and 36.

Conclusion

Claims 1 and 36 have been amended. Claims 1, 2, 9-10, 18-19 and 31-36 remain pending.

In view of this amendment and for at least the reasons given above, the Applicant respectfully submits that Claims 1, 2, 9, 10 and 36 are allowable. The Applicant further respectfully submits that Claims 3-8 and 37-67 are allowable as claims dependent on allowable claims and should be reinstated and allowed.

The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully submitted,



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